

Serial No. 10/618,654

H-720-03

IN THE CLAIMS

1-24. (Canceled)

25. (Currently amended) A method ~~as claimed in claim 24,~~  
for transferring data within a storage system, comprising the  
steps of:

reading current data;

referring to a staging information table that includes  
information which indicates the direction of pre-reading and  
the data volume of pre-reading, while the current data is  
being read;

staging the current data to a cache memory in accordance  
with the information referenced in the step of referring to  
the staging information table;

generating redundant data from a plurality of data;

managing the redundant data and the data from which the  
redundant data is generated as a parity group; and

restoring the current data from the redundant data and  
from the data from which the redundant data is generated in  
the event of a data read failure;

wherein said step of referring to the staging information  
table further refers to information in the staging information

Serial No. 10/618,654

H-720-03

table indicating whether said redundant data is to be read, regardless of whether the current data is successfully read in said reading step.

26. (Previously presented) A method as claimed in claim 25, wherein said step of referring to the staging information table further refers to a redundant data staging execution flag that indicates whether said redundant data is to be read.

27. (Previously presented) A method as claimed in claim 26, wherein, if said redundant data staging execution flag indicates that said redundant data is to be read, data in the parity group containing said current data is read.

28. (Previously presented) A method as claimed in claim 26, further comprising the step, performed by a user, of setting the redundant data staging execution flag in said staging information table.

29. (Previously presented) A method as claimed in claim 26, further comprising the step, performed by an electronic controller, of setting the redundant data staging execution

Serial No. 10/618,654

H-720-03

flag in said staging information table in response to a command.

30. (Previously presented) A method as claimed in claim 25, wherein said step of referring to the staging information table further refers to a pre-read staging execution flag that indicates whether successive data to said current data is also to be read, in response to a command.

31. (Previously presented) A method as claimed in claim 30, wherein, if said pre-read staging execution flag indicates that said pre-read staging is to be executed when the current data is read, forward successive data to the current data is read.

32. (Previously presented) A method as claimed in claim 30, wherein, if said pre-read staging execution flag indicates that said pre-read staging is to be executed when the current data is read, backward successive data to the current data is read.

33. (Previously presented) A method as claimed in claim 30, wherein, if said pre-read staging execution flag indicates

Serial No. 10/618,654

H-720-03

that said pre-read staging is to be executed when the current data is read, forward and backward successive data to the current data is read.

34. (Previously presented) A method as claimed in claim 30, further comprising the step, performed by a user, of setting the pre-read staging execution flag in said staging information table.

35. (Previously presented) A method as claimed in claim 30, further comprising the step, performed by an electronic controller, of setting the pre-read staging execution flag in said staging information table in response to a command.

36. (Currently amended) A method ~~as claimed in claim 23~~ for transferring data within a storage system, comprising the steps of:

reading current data;

referring to a staging information table that includes information which indicates the direction of pre-reading and the data volume of pre-reading, while the current data is being read;

Serial No. 10/618,654

H-720-03

staging the current data to a cache memory in accordance with the information referenced in the step of referring to the staging information table;

wherein said step of referring to the staging information table further refers to information in the staging information table indicating whether redundant data to said current data is to be read, regardless of whether the current data is successfully read in said reading step.

37. (Previously presented) A method as claimed in claim 36, wherein said step of referring to the staging information table further refers to a redundant data staging execution flag that indicates whether said redundant data is to be read.

38. (Previously presented) A method as claimed in claim 36, further comprising the step, performed by a user, of setting the redundant data staging execution flag in said staging information table.

39. (Previously presented) A method as claimed in claim 36, further comprising the step, performed by an electronic controller, of setting the redundant data staging execution

Serial No. 10/618,654

H-720-03

flag in said staging information table in response to a  
command.

40-51. (Canceled)